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REVISED FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT FOR BUILDING 538 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME

3/14/2011

NAS BRUNSWICK

ENVIRONMENTAL DEPARTMENT
NAVAL AIR STATION
437 HUEY DRIVE
BRUNSWICK, ME 04011

March 14, 2011

Mr. Edward Vigneault
Maine Department of Environmental Protection
Division of Oil and Hazardous Waste Facilities Registration
17 State House Station
Augusta, ME 04333-0017

Subj: Final RCRA Partial Closure Report for Building 538 (Revised)

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Building 538 at Naval Air Station Brunswick is provided as Enclosure (1).

If you have any questions, please contact Mr. Mike Fagan at 921-1717 or via e-mail at michael.fagan1@navy.mil.

Sincerely,

FOR LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Report for Building 538

Copy to:
NAVFAC Mid-Atlantic (B. Abraham)
NAS Brunswick (M. Fagan/D. Smith)
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RCRA PARTIAL CLOSURE REPORT
for
BUILDING 538 – NEX SERVICE STATION PARCEL
BUILDING 605 – ENVIRONMENTAL SHED
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
FEBRUARY 2011

1. INTRODUCTION

The purpose of this report is to present the findings and conclusions of the investigation conducted to determine if the Maine Department of Environmental Protection (MEDEP) RCRA or hazardous waste closure requirements have been completed for the Building 538 parcel at Naval Air Station Brunswick (NAS Brunswick).

Note: This closure report supersedes the Final RCRA Partial Closure Report for Building 538 – NEX Service Station Parcel dated April 2010. This revised closure report includes additional information requested by MEDEP, including information summarizing additional sampling and associated laboratory analytical results, as well as cleaning activities conducted for Building 538. This revised final report also adds Building 605 (Environmental Shed).

2. PROPERTY DESCRIPTION

The Building 538 parcel is located in the central portion of NAS Brunswick (Figure 1). The approximately 1-acre parcel is bordered to the north by the Building 295 parcel, to the east by the Building 11 parcel, to the south by Burbank Avenue and the Building 27 parcel, and to the west by Pelican Street and the Buildings 225 and 252 parcel (Figure 2). The parcel includes Building 538 (the Navy Exchange [NEX] Service Station building), Building 605 (Environmental Shed) and associated asphalt-paved and grass-covered areas. Photographs taken during the site visit are provided in an attachment.

Building 538

The original portion of Building 538 (NEX Service Station), the westernmost part of the building ("West Garage" and "Store" area on Figure 3), was constructed in 1957. The building as it exists today consists of a 5,292 square-foot, single-story, concrete and block building on a slab foundation. Until recently the NEX Service Station served as an automobile service and gasoline retail store serving military personnel. Building 538 contains a two-bay service area (West Garage), a three-bay (originally a four-bay) service area (East Garage), a recycling area (formerly one of the East Garage repair bays), retail space (Store), storage rooms, and office space. The facility is no longer operating; the service island/dispenser area, gasoline pumps, and gasoline underground storage tanks (USTs) were removed in 2009. Building 538 is heated by a forced-air heating system with a fuel-oil-fired furnace.

Building 538 is located within the NEX Service Station Petroleum-Oil-Lubricants (POL) Site, where petroleum-contaminated soil and groundwater were remediated as part of the POL Site program, as summarized in Section 3.

Building 605

Building 605, Environmental Shed, is located immediately north of Building 538, at the end of the north wing of the L-shaped building (Figure 3). Building 605 was constructed in 1993 and consists of a 120-square-foot, wood-frame, single-level building with clapboard exterior. An empty concrete pad is located adjacent to the building on its west side. Building 605 is comprised of a single room and has a concrete slab foundation. It, houses the equipment associated with the former air sparging and soil vapor extraction (SVE) groundwater treatment system, which is no

longer active, for the POL site. (The shed was previously referred to as the "Treatment Building" in several NEX Service Station POL Site reports.) The equipment associated with the former air sparging system includes a positive displacement blower (skid-mounted, belt-driven) and parts of a polyvinyl chloride (PVC) air-injection manifold. The system also included two carbon tanks that were located on the pad west of the building. The air sparging blower was utilized to inject ambient air into the subsurface. Equipment associated with the former SVE system includes a vacuum extraction blower (closed coupled with motor), moisture separator tank (vertical steel vessel, approximately 50 to 100 gallons in volume), and associated PVC piping and valves. Building 605 is not heated or air-conditioned.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning Building 538, including past use and operations at that location.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous waste records. Aerial photographs dated 1958, 1978, 1981, 1984, 1989, and 1993 (all produced by James W. Sewall) were reviewed along with Public Works Department site base maps dated 1943, 1946, 1952, 1956, 1983, 1989, and 2006 (PWD, 1943, 1946, 1952, 1956, 1983, 1989, and 2006) to provide historical information, as summarized below.

- NAS Brunswick maps dated 1943, 1946, and 1952 indicate that no buildings were present on the parcel during this time.
- On the 1956 map, the Navy Exchange Filling Station (T-220) is present on the Building 538 parcel, with Building 295 (Water Reservoir Pump House) to the north.
- A 1955 drawing shows the west garage oil/water (O/W) separators discharge to the stormwater system (PWD, 1955). (O/W separator cleaning specifications state that these units discharge to the sanitary sewer system [PWD, 1996].)
- The 1958 aerial photograph shows Building 538 (as originally constructed in 1957) in its current location. This photograph also shows Buildings 17 and 19, both barracks, present to the north and west of the parcel, respectively, and Building 295 to the north of the parcel.
- A 1969 plan shows a 24-foot-wide addition to the eastern end of the original building (the "Storage"/ "Office" area was added, directly east of "Store", on Figure 3) (PWD, 1969).
- A 1979 plan shows a 20-foot-long addition to what was the northern end of Building 538 at that time (the northernmost "Storage" area on Figure 3). This addition was described as an open-ended, metal-covered shed with aluminum roof and siding. The plan also shows the addition of a 14-foot-long fenced-in area directly adjacent to the new shed, to the north (PWD, 1979).
- Sometime prior to the 1978 aerial photo, Building 19 (to the west) was demolished; Building 17 was demolished prior to the 1981 aerial photo, with the Navy Exchange (Building 11) constructed to the west of the parcel.
- From 1983 on, no additional changes to the area are noted until the 2003 building list, which includes Building 605 on the parcel. In the 2006 site plan, Building 605 (unlabelled) is present in its current position.

According to NAS Brunswick Environmental Department personnel, since its construction in 1957, the sole use of Building 538 has been as an automotive service and gasoline filling station, including retail vending space and a bottle-and-can recycling space.

Routine vehicle repair and maintenance activities associated with automobile service stations were conducted at Building 538. These activities included oil changes, battery replacements, tire

changes, etc., and involved generation of various automotive fluids and solid wastes (e.g. used motor oil, used transmission fluid, used power-steering fluid, used antifreeze, used brake fluid, waste gasoline, used filters, engine belts, brake parts, exhaust system parts, and used tires) (see Hazardous Waste Quantities listed below). It is assumed that a limited amount of welding, soldering, and painting occurred at the NEX service station, and a limited amount of brake cleaner use and solvent use occurred, for the cleaning of parts, etc. (see below). The Hazardous Waste Department maintains a list of hazardous wastes generated by activity (department). The table below summarizes materials generated at the NEX Service Station from 1993 through 2009. These materials were collected and disposed of properly at an off-site facility by the NAS Brunswick Environmental Department.

NEX Service Station Hazardous Waste Quantities (1993 through 2009)

Description	Quantity
aerosol empty	1
ballast – PCB	1.9
battery – leads	39
batteries - mercury	2
cathode ray tubes (CRTs)	
gasoline - filters	21
gasoline - waste	1,170
gasoline – water contaminated	2,280
investigation derived waste (1) – rinsate contaminated	380
IDW[2] – soil & water contaminated	2,312
IDW[2] – solids contaminated	3,023
paint – latex semi-gloss	22
paint –old enamel	60
paint -turpentine	10
paint –used paint	100
paint – X O Rust	1
Siding - asbestos	24
solvent - Safety Kleen (2)	

(1) IDW related to POL Site

(2) Also referred to as petroleum naphtha, solvent non-halogenated, and solvent change-out

Waste oil was generated at Building 538 during the servicing of vehicles and was temporarily stored onsite in a successive series of underground and aboveground storage tanks (ASTs) located on the western side of Building 538, for the period of 1957 to 2001 (see listing of tanks below and Figure 2). According to NAS Brunswick records, the following underground storage tanks (USTs) were present at Building 538 (Environmental Department, 2009). No USTs were registered to Building 605.

MEDEP Tank Registration Number	NAS Brunswick Tank Number	Capacity and Material	Stored Product	Installation Date	Removal Date
None	None	10,000-gallon steel	gasoline	1957	1974
None	None	10,000-gallon steel	gasoline	1957	1974
None	None	550-gallon steel	waste oil	1957	1974
10045-059	538.0	275-gallon steel	waste oil (1)	1974	1989
10045-063	538.4	1,000-gallon steel	No. 2 fuel oil	1975	1991
14682-001	538.1	10,000-gallon steel	unleaded gasoline	1974	1992
14682-002	538.2	10,000-gallon steel	premium unleaded gasoline	1974	1992
14682-003	538.3	10,000-gallon steel	leaded gasoline	1974	1992
14682-004	None	10,000-gallon steel	premium unleaded gasoline	1993	2009
14682-005	None	10,000-gallon steel	unleaded gasoline	1993	2009
14682-006	None	10,000-gallon steel	unleaded gasoline	1993	2009

Previously reported in NAS Brunswick Master/Historical UST List as containing lube oil (Environmental Department, 2009). Refer to Milne Associates, Inc., prepared NAS Brunswick As-Built Tank Removal Part Plans Bldg's 225, 233, 584 & 538 (MAI, 1991).

According to NAS Brunswick records, the following ASTs were present at Building 538 (Environmental Department, 2009). No ASTs were registered to Building 605.

NAS Brunswick Tank Number	Capacity and Material	Stored Product	Installation Date	Removal Date
A538.0	550-gallon DWS	No. 1 fuel oil (heating)	1991	Active
A538.1	275 gallon-SWS	waste oil	1989	1996
A538.2	250 gallon-DWSV	waste oil	1996	2001

DWS: double-walled steel; DWSV: double-walled, steel vault; SWS: single-wall steel

The west garage service bay area of Building 538 has two floor drains featuring O/W separators with capacities of 45 gallons that are connected to the base sanitary sewer system and one floor drain in the former repair bay (south of east garage) has featuring a 20-gallon OWS that is also connected to the base sanitary sewer system (PWD, 1996). No records were found that indicate a sump, holding tank, or dry well was ever used for fluids disposal. No OWS were registered to Building 605.

When the service station at Building 538 was operating, the OWS, which discharge to the sanitary sewer system, were serviced annually as part of the OWS maintenance program (PWD, 1996). The servicing of the OWS included removal of accumulated petroleum products and excessive sludge, and collective disposal of this material as non-hazardous, oil-contaminated liquid and solids. However, the most recent OWS cleaning event in early June 2010 did not include the Building 538 OWS because the facility is no longer in operation. According to NAS Brunswick Public Works personnel, the next base-wide OWS servicing event is scheduled for spring 2011 and will include the Building 538 OWS. Therefore, an exception will be applied to the Building 538 Partial RCRA Closure for the OWS and associated floor drains. After OWS cleaning activities have occurred in spring 2011, an addendum will be issued to the Partial RCRA Closure Report to document this event.

A review of the MEDEP spills database identified the following reported spills for the NEX Service Station parcel (MEDEP, 2010):

Spill Report Date	MEDEP Spill Report Number (1)	Substance	Released Quantity	Report Status	Notes
July 17, 1981	81-1981	unleaded gasoline	1,450 gallons	Final Report	Wells & product skimmer installed, with 50 gallons recovered. Refer to P-675-1992 for LUST removal
July 14, 1989	651-1989	unleaded gasoline	not reported	Final Report	Release of an undetermined quantity of gasoline. No other information provided. Refer to NASB Spill Log entries for July 13 and 14, 1989
October 19, 1989	675-1992	gasoline	500 gallons	Final Report	Significant prohibited discharges confirmed by MEDEP related to the 1,450- gallon-release n 1981. Excavated soil was land-farmed at the west side runway sand pit area under one-time MEDEP approval. Brief notation of historic vapor intrusion impacts to Building 27. Refer to MEDEP Spill Report No. P-81-1981 and NASB Spill Log entries for July 13 and 14, 1989
June 9, 1995	355-1995	unleaded gasoline	9 gallons	Final Report	Response to evidence of a leak within interstitial space of product piping secondary containment. USTs involved: 14682-4 through -6

October 19, 1995	788-1995	unleaded gasoline	199 gallons	Final Report	Investigation and documentation of 1995 notification of unreported long-term gasoline vapor intrusion into Building 27. Refer to MEDEP Spill Report Nos. P-81-1981 and P-675-1995. USTs involved: 14682-4 thru -6

(1) Spill report prefix "P-" is not shown

A review of the NAS Brunswick spill logs identified the following reported spills for the NEX Service Station (Environmental Department, 1988 and 1999).

Spill Date	MEDEP Spill Report Number (1)	Substance	Released Quantity	Notes
July 13, 1989	none, refer to July 14, 1989 entry	gasoline	not reported	Report of a leaking pump which was to be secured with adsorbent placed in sump
July 14, 1989	651-1989	gasoline	not reported	Precision Testing completed tightness testing of the pump lines and confirmed leaks in pump lines
June 19, 1992	none	none	none	Notation that two abandoned car batteries recovered at Thrift Shop were transported to Building 538 to await offsite shipment
March 6, 1997	none	gasoline	10	Release to ground of vehicle gasoline tank spillage, although "no release to the environment" noted, nor cleanup description
June 23, 1999	none	gasoline	5 – 8 (est.)	Release to ground due to a leak in vehicle gas tank . The NAS Fire Dept. responded and temporarily plugged the leak. Speedi-Dry used to clean up release on ground
December 4, 2002	none	gasoline	3 (est.)	NAS Fire, HAZWASTE, Public Works, and Environmental Depts. responded to release from bucket loader in vicinity of Building 538. Fluid cleaned up and no release to waters
May 14, 2003	none	hydraulic fluid	25	NAS Fire Dept. responded to release and "contained and recovered" the release
July 12, 2004	none	battery fluid	unknown	Notation of battery fluid release from July 10, 2004.

The NAS Brunswick Removed Transformer Database lists one non-polychlorinated-biphenyl (PCB)-containing electrical transformer for Building 538 (none were listed for Building 605). Information provided in the database for the transformer is listed below. The serial number for the RTE-manufactured unit indicates that it was manufactured after 1979 and therefore is unlikely to contain PCB. As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). However, due to the age of the building, it is possible that PCB-containing transformers were in service at the Building 538 transformer pad at some time in the past.

Transformer	Manufacturer	Serial No.	Manufacture Date	Notes
75-kVa non-PCB-containing	RTE (1)	RTE 876000111 (2)	1987	adjacent to Building 295 transformer

(1) Rural Transformer & Electric (RTE), now owned by Cooper Power Systems

(2) The first two digits of the serial number denotes the year of manufacture (EES, 1998)

Building 605

As summarized in Section 2, Building 605 houses equipment associated with the now inactive air sparging and SVE systems. No hazardous waste was historically stored at Buildings 605, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith, and no hazardous

materials were used in its operation. The Navy plans to demolish/remove the building and associated equipment in the near future.

The air sparging components, designed to inject ambient air into the subsurface, are not likely to have any associated hazardous waste residue. The SVE system components (including granular activated carbon [GAC], no longer present at the building) were designed to remove the generated vapor-phase contamination, and these components contact the extracted soil vapors during system operation, however, the SVE system components remaining at the building do not contain any materials that can adsorb and retain organic vapors (i.e. activated carbon or other adsorbent media). The only remaining component with a potential to hold some contaminant residue is a moisture-separator tank, where water with organic compounds could accumulate during the system operation. The moisture-separator tank will be checked for the potential presence of liquid/waste residue prior to removal of the system.

A portion of the Building 538 parcel is located within the NEX Service Station POL Site (Figure 2). As a result of historical gasoline leaks from the former USTs and associated piping, soil and groundwater underlying the area spanned by the NEX Service Station POL Site and Building 27 were contaminated by petroleum hydrocarbons, specifically, gasoline-range organics (GROs). Based on available reports, only petroleum-related analyses were conducted during the investigations. Past active remediation has consisted of the excavation and removal of petroleum-contaminated soil, air sparging/soil vapor extraction, and a chemical oxidation event. Most recently, a bioremediation program was implemented using enhanced biological activity (microbes) to attempt to treat the dissolved and sorbed phases of petroleum contamination in the subsurface near Building 27 (EA, 2004). The most recently active fuel USTs were removed in September 2009, as indicated above, and additional contaminated soil removal occurred in December 2009 (Acadia, 2009). Groundwater monitoring is ongoing as part of the activities related to the POL Site. A remedial action report was not available at this time. Any specific use limitations being placed on this area because of the petroleum-related leaks should be identified in this report.

Information concerning groundwater underlying the Building 538 parcel is available in the 2004 Corrective Action Plan for the NEX Service Station POL Site, prepared by EA Engineering, Science, and Technology, Inc. (EA, 2004). In the area of the NEX Service Station POL Site, groundwater contour data have indicated a prominent groundwater flow pattern to the southwest. The depths to groundwater in this area as measured in June 2003 ranged from approximately 3 feet below ground surface (bgs) to approximately 8 feet bgs. Historically, seasonal fluctuations of the water table of up to several feet are common at the NEX Service Station POL Site, and the shallow groundwater table typically exhibits a shallow hydraulic gradient of approximately 0.010 to 0.011 foot per foot (ft/ft) (EA, 2004).

4. SITE VISIT AND INVESTIGATION

A Building 538 site visit was conducted on February 2, 2010 by Tetra Tech personnel, Mr. Brandon Smith, P.E., and Mr. James Forrelli, P.E., and a Building 605 site visit was conducted on July 23, 2010 by Tetra Tech personnel, Mr. Brian Geringer. The purpose of the visits was to verify information gathered during the records search and to collect additional information as necessary to prepare this RCRA Partial Closure Report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager, on both site visits. Buildings 538 and 605 and the associated parcel of land were visually inspected for signs of hazardous waste generation or storage. Site visit observations, recorded on the attached Building Inspection Forms [(1)] are summarized below:

<u>Building 538</u>

- At the time of inspection, Building 538 was unoccupied and in fair condition. The gasoline pumps and island, hydraulic lifts, and automotive and retail supplies were not present.

- No evidence of current or past hazardous waste generation activities was observed.
- No evidence of hazardous waste residues was observed.
- Typical petroleum staining was observed in the service bay and a recent leak of fuel oil from the day tank was observed with a strong petroleum odor and some staining.
- No modifications to the structure, which may conceal signs of a past release, were observed.
- No hazardous waste storage or accumulation areas were observed. The locations of the former waste-oil ASTs and the location of the former universal-waste storage area prior to collection by the NAS Brunswick Environmental Department are unknown.
- One pad-mounted transformer location was observed on the north side of the building. No evidence of a past leak from these transformers was observed.

Building 605

- At the time of inspection, Building 605 was unoccupied and in good condition.
- A small concrete pad was observed adjoining the west wall of Building 605, and two pipe stumps exited the building's west wall. It is believed that this pad is the former location of the GAC unit associated with the now inactive SVE system.
- No evidence of current or past hazardous waste generation activities was observed.
- No evidence of hazardous waste residues was observed.
- No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed.
- No modifications to the structure, which may conceal signs of a past release, were observed.
- No hazardous waste storage areas or hazardous waste accumulation areas were observed in Building 605.
- No record of hazardous waste stored at Building 605 was discovered to date.
- No other evidence of current or past hazardous waste generation was observed.

Based on the site visit observations and records research findings, samples were collected at Building 538 to investigate the potential presence of hazardous waste residue as a result of the automotive service and maintenance activities previously conducted there. Soil samples were also collected around the Building 538 pad-mounted electrical transformer as it is possible that PCB-containing transformers were in service at the Building 538 transformer pad at some time in the past.

Based on available information regarding historical activities at the Building 538 NEX Service Station parcel, there is no evidence that groundwater underlying the parcel has been adversely impacted by a release of hazardous materials that is related to the RCRA Partial Closure of the Building 538 parcel or Building 605. However, groundwater at the Building 538 parcel has been previously impacted by releases from the NEX Service Station that have resulted in dissolved-phase hydrocarbon contamination and are being investigated under the POL program.

Electrical Transformer Investigation

Because Building 538 was constructed prior to 1979, the transformer pad, located north of the building, could potentially be an area of PCB soil contamination if there had been an historical transformer leak. On February 24, 2010, Tetra Tech collected surface soil samples from four locations, one location on each side of the transformer pad, using a hand auger. Sample locations are shown on Figure 3, which also shows the Building 538 transformer pad directly adjacent to (south of) a second transformer pad, for Building 295 (north of Building 538). Due to the extremely close proximity of these two adjacent transformer pads (each used for a different building), and the fact that the northernmost soil sample (SB04) was collected directly north of the northernmost transformer pad which is associated with Building 295, this samples location, SB04, has sample identification numbers that use B295, rather than B538.

Soil samples were collected from the four locations at the following depth intervals: four samples were collected from 0 to 6 inches bgs (NASB-B538-SB01-0006 through NASB-B538-SB03-0006, and NASB-B295-SB04-0006); two samples were collected from 6 to 24 inches bgs (NASB-B538-SB02-0624 and NASB-B295-SB04-0624); one sample was collected from 6 to 18 inches bgs (NASB-B538-SB01-0618); and one sample was collected from 6 to 12 inches bgs (NASB-B538-SB03-0612).

All soil samples were submitted for PCB analysis by Tetra Tech's subcontracted analytical laboratory, Analytics Environmental Laboratory (Analytics), Portsmouth, New Hampshire. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation. As presented in the attached Table 1, PCB was not detected in any of the soil samples collected at Building 538 (all concentrations are below the MEDEP RCRA standard of 1 part per million [ppm] for total PCB in soil). The EPA Regional Screening Levels [RSLs] for Residential Soil are also included in Table 1 for informational purposes (EPA, 2009).

Residue Investigation

Surface wipe samples were collected at Building 538 to investigate the potential presence of hazardous waste residue that may have resulted from the building's use as an automotive service facility. These additional sampling activities and associated results for the Building 538 closure investigation are discussed in the following paragraphs.

On July 29, 2010, wipe samples were collected from 15 locations in Building 538, including seven floor and eight wall locations, as shown on Figure 3. The wipe samples were submitted for RCRA metals, and a subset was submitted for semi-volatile organic compounds (SVOCs) analysis by Tetra Tech's subcontracted analytical laboratory, Analytics Environmental Laboratory (Analytics), of Portsmouth, New Hampshire. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, laboratory blank contamination evaluation, and completeness evaluation.

Analytical results for the wipe samples are presented in Table 2. For lead, analytical results were compared to the following MEDEP criteria for lead-contaminated settled dust, applicable for RCRA closures:

Floors: 40 micrograms per square foot ($\mu g/ft^2$)
Walls and other flat surfaces up to a height of 8 feet: 250 $\mu g/ft^2$
Surfaces above 8 feet: visibly clean (dust-free)

There are no Maine criteria for the other seven RCRA metals or for the SVOCs. However, for these RCRA Partial Closure activities, the MEDEP has approved the use of World Trade Center (WTC) Settled Dust Screening Values (WTC, 2003) as clearance values for wipe sample results for six of the other seven metals (there are no WTC screening values for selenium).

As shown in Table 2, lead was detected at levels that exceeded the MEDEP criterion for floors (40 $\mu g/ft^2$) in four floor-wipe samples: two in the west garage and two in the east garage. In all wall-wipe samples, lead levels were below the MEDEP criterion for walls. All levels of other detected metals in floor- and wall-wipe samples were below the WTC screening values. Low levels of two to five SVOCs were detected in those samples analyzed for SVOCs. These compounds include benzaldehyde, bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, caprolactam, and di-n-butyl phthalate. Based on the analytical results, cleaning of Building 538 was required to remove lead-contaminated residue exceeding the associated MEDEP criterion for dust on floors (discussed in Section 6).

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations, and NAS Brunswick Environmental Department personnel interviews, former operations at Building 538 generated small quantities of various wastes on an episodic basis; these wastes were handled and disposed of under the NAS Brunswick hazardous waste department, as discussed in Section 3. In addition, sampling investigation results indicate that former activities at Building 538 resulted in the presence of hazardous waste residue in the form of lead-contaminated settled dust, requiring remedial actions to fulfill MEDEP hazardous waste closure requirements. The areas impacted by lead dust were also addressed by the closure actions described in Section 6.0.

6. CLOSURE ACTIONS

Based on analytical results discussed in Section 4, closure actions were required at Building 538 to satisfy the MEDEP hazardous waste closure requirements. Closure actions were conducted in October 2010 and January 2011, and consisted of the cleaning of floors and walls in areas within Building 538, as discussed below.

Tetra Tech's cleaning subcontractor, Global Remediation Services (Global) performed floor-cleaning activities at Building 538, based on lead criterion exceedances in wipe samples, as discussed in Section 4. On October 28, 2010, cleaning activities were conducted in the west garage and the east garage at Building 538. Prior to cleaning, floor openings were covered and sealed with polyethylene sheeting. The floors were then manually swept and then vacuumed with a high-efficiency particulate air (HEPA) vacuum. After sweeping and vacuuming, floors were sprayed with a 2-percent, lead-specific detergent solution, scrubbed, and pressure-washed using a 5,000-pounds-per-square-inch (psi) steam- cleaner. All cleaning wastewater was containerized using a wet-vacuum, placed in two 55-gallon drums, and transferred to the NAS Brunswick hazardous waste department for disposal. Upon completion, the Tetra Tech field representative performed a visual inspection of the cleaned areas.

Post-cleaning, confirmatory floor-wipe samples were collected at five locations from the cleaned floor areas of Building 538 on October 29, 2010 (Figure 4). Samples were submitted to Analytics for lead analysis. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, reporting limit evaluation, and data completeness evaluation. As seen in Table 3, lead levels in the post-cleaning confirmatory floor-wipe samples were above the associated MEDEP floor criterion.

A second decontamination event (Event 2) was conducted at Building 538 on January 18, 2011, based on lead criterion exceedances in confirmatory wipe samples collected following decontamination Event 1, as discussed above. Tetra Tech's cleaning subcontractor, TK&K Services (TK&K), performed floor-cleaning activities in the west garage and the east garage, using the procedures described above. All cleaning wastewater was containerized using a wet-vacuum, placed in two 55-gallon drums, and transferred to the NAS Brunswick hazardous waste department for disposal. After the work areas were allowed to dry, Event 2 post-cleaning confirmatory wipe samples were collected on January 19, 2011. Five floor-wipe samples were collected for lead analysis at locations shown on Figure 4. The samples were submitted to Tetra Tech's subcontracted analytical laboratory, Katahdin Analytical Services (Katahdin) of Scarborough, Maine. The resulting analytical data underwent limited data validation consisting of blank contamination evaluation, reporting limit evaluation, and data completeness evaluation. Analytical results for the January 19, 2011 wipe samples are included in Table 4. The confirmatory wipe sample results following the Event 2 decontamination indicated that lead was detected at levels exceeding the associated MEDEP floor criterion in two of the five floor-wipe samples, both from the west garage.

A third decontamination event (Event 3) was conducted at Building 538 for the west garage floor, on January 31, 2011. Tetra Tech's cleaning subcontractor, TK&K, again performed floor-cleaning

activities using the procedures described above. All cleaning wastewater was containerized using a wet-vacuum, placed in a 55-gallon drum (approximately one-half drum wastewater), and transferred to the NAS Brunswick hazardous waste department for disposal. After the work areas were allowed to dry, post-cleaning confirmatory wipe samples were collected on February 1, 2011 (Event 3). Two floor-wipe samples were collected from the west garage at locations shown on Figure 4, and the samples were submitted to Katahdin for lead analysis. The analytical data underwent limited data validation activities, as stated above for Event 2. Analytical results for the February 1, 2011 wipe samples (following Event 3 decontamination) are included in Table 5. As shown, the lead result for one of the two samples was less than the associated MEDEP floor criterion of 40 µg/ft^2, and the result for the second sample slightly exceeded the criterion; however, the average of the two samples, 39.5 µg/ft^2, is below the MEDEP criterion for floors.

Since the average lead level does not exceed the MEDEP floor criterion, additional closure action is not warranted at Building 538.

7. OTHER ENVIRONMENTAL CONSIDERATIONS

The USTs or ASTs known to be associated with the Building 538 parcel are discussed in Sections 3 and 4.

8. LIMITATIONS

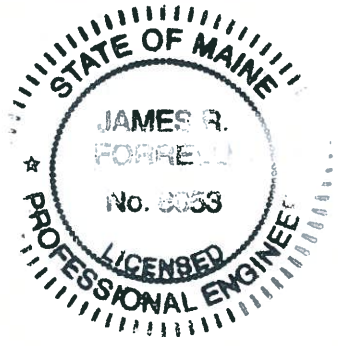
This investigation of the hazardous waste closure requirement applies to the Building 538 parcel, including Building 605, (as shown on Figure 2) only.

9. CERTIFICATION

Based on the findings of the investigation as presented in this Partial Closure Report, historical operations resulted in the generation of hazardous waste including residue in the form of lead-contaminated settled dust in the garage areas at Building 538, NAS Brunswick, Maine. With the exception of the oil/water separators and the floor drain system, the hazardous waste closure of the Building 538 NEX Service Station parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.

James R. Forrelli

James Forrelli, P.E.
Senior Project Engineer
Tetra Tech NUS, Inc.



(1) The Building Inspection Form provides preliminary information collected during the building inspection, including information from visual observations, Navy personnel interviews, and from documents reviewed during file reviews. It does reflect any additional information provided at a later date that further clarifies or corrects preliminary information collected during the building inspection and file reviews.

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TABLE 1
SOIL SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 538 – NEX SERVICE STATION
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID	**EPA RSLs[(1)] (µg/kg)**	NASB-B538-SB01-0006	NASB-B538-SB01-0618	NASB-B538-SB02-0006	NASB-B538-SB02-0624	NASB-B538-SB03-0006	NASB-B538-SB03-0612	NASB-B295-SB04-0624[(3)]
LOCATION		transformer pad	transformer pad	transformer pad	transformer pad	transformer pad	transformer pad	transformer pad
MATRIX		soil	soil	soil	soil	soil	soil	soil
DEPTH		0-6 inch bgs	6-18 inch bgs	0-6 inch bgs	6-24 inch bgs	0-6 inch bgs	6-12 inch bgs	6-24 inch bgs
SAMPLE DATE		02/24/10	02/24/10	02/24/10	02/24/10	02/24/10	02/24/10	02/23/10
PCB (µg/kg)								
Aroclor-1016	3,900	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1221	140	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1232	140	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1242	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1248	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1254	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1260	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Total PCB [(2)]	1,000	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U

Notes:
(1) EPA Regional Screening Levels [RSLs] for residential soil provided for informational purposes
(2) MEDEP action limit for PCB spill (1 mg/kg)
(3) Sample located between Buildings 295 and 538 transformer pads.
bgs below ground surface
µg/kg micrograms per kilogram
U not detected (with associated detection limit)
PCB polychlorinated biphenyl

TABLE 2
PRE-CLEANING WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 538 – NEX SERVICE STATION
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 1 OF 2

SAMPLE ID[(1)]				B538-WP01	B538-WP02	B538-WP03	B538-WP04	B538-WP05	B538-WP06	B538-WP07	WP-07 (duplicate)
LOCATION				west garage west floor	west garage east floor	west garage north wall	west garage east wall	west garage south wall	west garage west wall	southeast storage floor	southeast storage south wall
MATRIX				wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe
EVENT				pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning
SAMPLE DATE				7/29/10	7/29/10	7/29/10	7/29/10	7/29/10	7/29/10	7/29/10	7/29/10
	CRITERIA										
	WTC	**MEDEP floor**	**MEDEP wall**								
METALS (µg/ft^2)											
arsenic	36	--	--	6.4 J	3.9 J	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	1.2 J	2.5 J
barium	10000	--	--	110 J	150 J	11 J	20 J	56 J	16 J	33 J	76 J
cadmium	140	--	--	4.1 J	5.7 J	1.1 UJ	3 J	2.7 J	15	0.93 UJ	5.7 J
chromium	440	--	--	44	48	3.7 UJ	3.9 UJ	10 J	4.2 UJ	9.3 J	15
lead	NA	40	250	130	300	6.3	11	87	6.7	14	24
mercury	15	--	--	0.093 U	0.093 U	0.093 U	0.19 J	0.37	0.19	0.19 J	0.19 J
selenium	--	--	--	6.5 U	6.5 U	4.4 J	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
silver	730	--	--	1.5 J	1.6 J	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	0.56 J
SEMIVOLATILES (µg/ft^2)											
benzaldehyde	--	--	--	13 J	14 J	13 J	na	na	na	11 J	11 J
bis(2-ethylhexyl)phthalate	--	--	--	9.3 U	100	53	na	na	na	110	150
butyl benzyl phthalate	--	--	--	28	70	45	na	na	na	150	160
caprolactam	--	--	--	23 U	23 U	23 U	na	na	na	37 J	23 U
di-n-butyl phthalate	--	--	--	9.3 U	9.3 U	46	na	na	na	9.3 UJ	21 J

TABLE 2
PRE-CLEANING WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 538 – NEX SERVICE STATION
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 2 OF 2

SAMPLE ID[(1)]				B538-WP08	B538-WP09	B538-WP10	B538-WP11	B538-WP12	B538-WP13	B538-WP14	B538-WP15
LOCATION				southeast storage south wall	room off east garage floor	east garage south floor	east garage center floor	east garage north wall	east garage west wall north	east garage west wall south	east garage north floor
MATRIX				wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe
EVENT				pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning
SAMPLE DATE				7/29/10	7/29/10	7/29/10	7/29/10	7/29/10	7/29/10	7/29/10	7/29/10
	CRITERIA										
	WTC	**MEDEP floor**	**MEDEP wall**								
METALS (µg/ft^2)											
arsenic	36	--	--	4.6 UJ	2.8 J	3 J	2.2 J	4.6 UJ	4.6 UJ	4.6 UJ	4 J
barium	10000	--	--	15 J	36 J	63 J	57 J	13 J	13 J	12 J	49 J
cadmium	140	--	--	1 UJ	2.2 J	4.3 J	3.6 J	0.83 UJ	1.5 UJ	0.56 UJ	3.1 J
chromium	440	--	--	3.7 UJ	11 J	23	14 J	3.7 UJ	3.7 UJ	4.8 UJ	18
lead	NA	40	250	21	19	69	26	80	76	49	69
mercury	15	--	--	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U
selenium	--	--	--	6.5 U	6.5 U	6.5 U	3.6 J	6.5 U	6.5 U	6.5 U	6.5 U
silver	730	--	--	3.7 U	3.7 U	0.74 J	3.7 U	3.7 U	3.7 U	3.7 U	0.56 J
SEMIVOLATILES (µg/ft^2)											
benzaldehyde	--	--	--	na	22	12 J	12 J	na	12 J	na	12 J
bis(2-ethylhexyl)phthalate	--	--	--	na	630	55	64	na	27	na	25
butyl benzyl phthalate	--	--	--	na	36000	56	44	na	33	na	20
caprolactam	--	--	--	na	23 U	33 J	32 J	na	27 J	na	38 J
di-n-butyl phthalate	--	--	--	na	690	9.3 U	9.3 U	na	28	na	9.3 U

Notes: (1) Sample prefix (NASB) not shown
Wipe sample surface area: 10 cm by 10 cm
WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria, World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003
µg/ft^2 micrograms per square foot
J estimated result
U not detected (with associated detection limit)
-- no criteria available
na not analyzed
NA not applicable
ND not detected
Shading indicates criteria exceeded

TABLE 3
POST-CLEANING WIPE SAMPLE RESULTS (EVENT 1)
RCRA PARTIAL CLOSURE REPORT
BUILDING 538 – NEX SERVICE STATION PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID[(1)]			B538-WP16	B538-WP17	B538-WP18	B538-WP18 (Duplicate)	B538-WP19	B538-WP20
LOCATION			west garage floor	west garage floor	east garage floor	east garage floor	east garage floor	east garage floor
MATRIX			wipe	wipe	wipe	wipe	wipe	wipe
EVENT			post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning
SAMPLE DATE	**WTC**	**MEDEP floor**	10/29/10	10/29/10	10/29/10	10/29/10	10/29/10	10/29/10
METALS (µg/ft^2)								
Lead	NA	40	1,300	1,000 J	140 J	51 J	260 J	440 J

Notes:
(1)Sample prefix "NASB" is not shown.
Wipe sample surface area: 10 cm by 10 cm
WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003
µg/ft^2 micrograms per square foot
J estimated result
Shading indicates criterion exceeded

TABLE 4
POST-CLEANING WIPE SAMPLE RESULTS (EVENT 2)
RCRA PARTIAL CLOSURE REPORT
BUILDING 538 – NEX SERVICE STATION PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID[(1)]			B538-WP21	B538-WP22	B538-WP23	B538-WP24	B538-WP25
LOCATION			west garage west floor	west garage east floor	east garage south floor	east garage center floor	east garage north floor
MATRIX			wipe	wipe	wipe	wipe	wipe
EVENT			post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning
SAMPLE DATE	**WTC**	**MEDEP floor**	01/19/11	01/19/11	01/19/11	01/19/11	01/19/11
METALS (µg/ft^2)							
Lead	NA	40	196	81.8	11.2	8.0	28.8

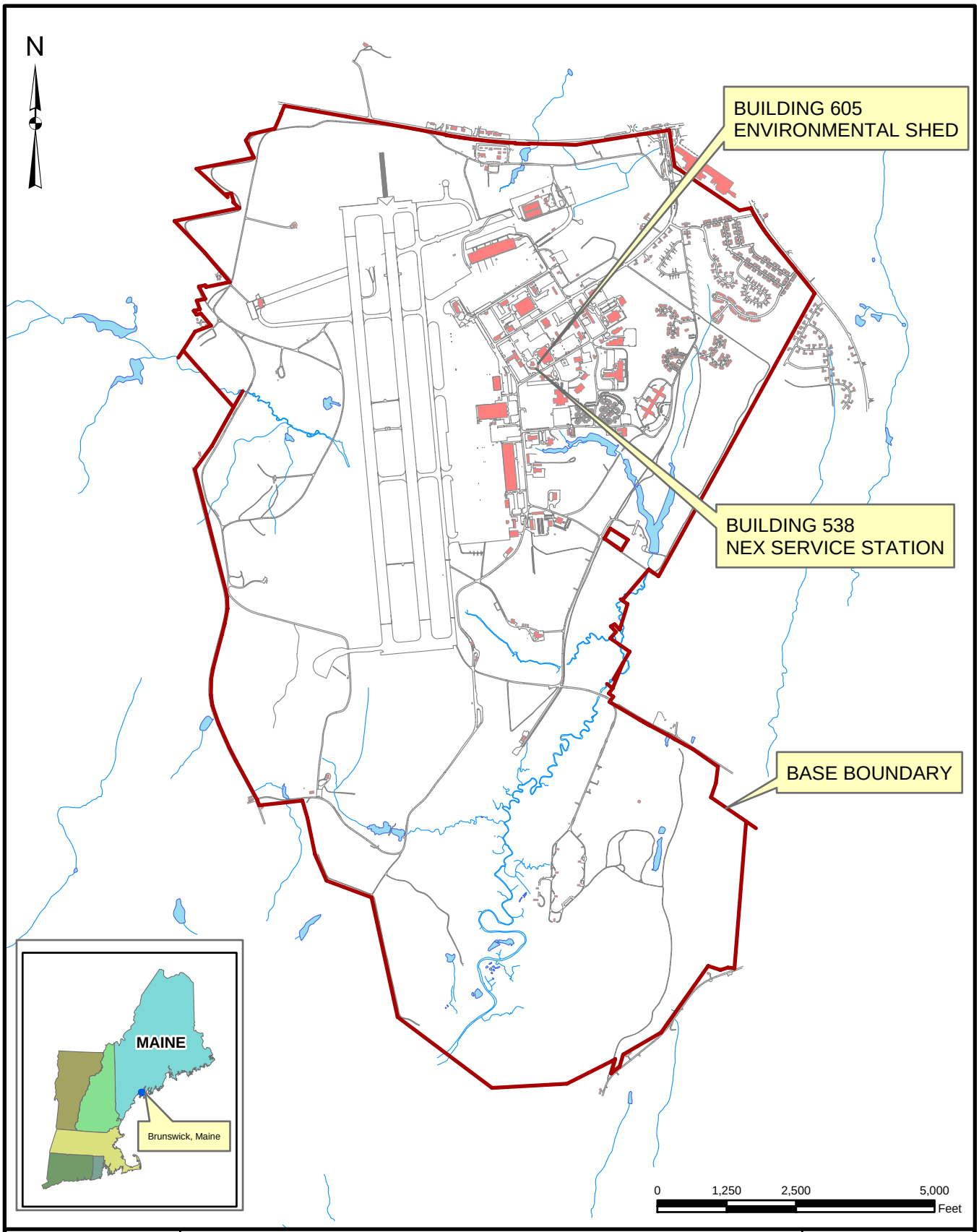
Notes:
(1)Sample prefix "NASB" is not shown Sample prefix "NASB" is not shown.
Wipe sample surface area: 10 cm by 10 cm
WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting
Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003
µg/ft^2 micrograms per square foot
J estimated result
Shading indicates criterion exceeded

TABLE 5
POST-CLEANING WIPE SAMPLE RESULTS (EVENT 3)
RCRA PARTIAL CLOSURE REPORT
BUILDING 538 – NEX SERVICE STATION PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID[(1)]			B538-WP26	B538-WP27
LOCATION			west garage west floor	west garage east floor
MATRIX			wipe	wipe
EVENT			post-cleaning	post-cleaning
SAMPLE DATE	**WTC**	**MEDEP floor**	02/01/11	02/01/11
METALS (µg/ft^2)				
Lead	NA	40	36.2	42.7

Notes:
(1) Sample prefix "NASB" is not shown.
Wipe sample surface area: 10 cm by 10 cm
WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003.
µg/ft^2 micrograms per square foot
J estimated result
Shading indicates criterion exceeded

I:\02258\CP.DR\NASB_BLSG_538_LOCUS.MXD DWM 02/18/11

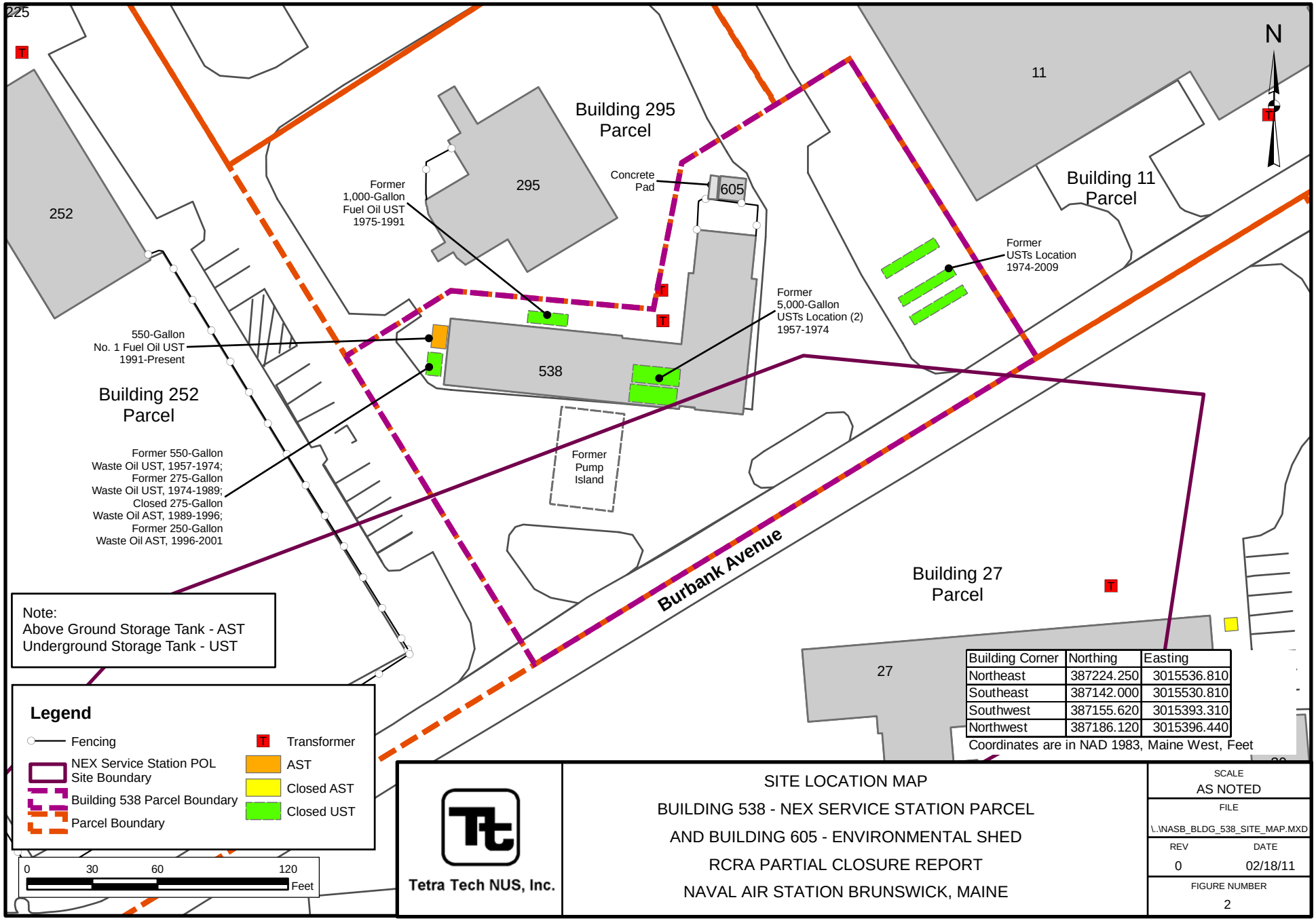


Tetra Tech NUS, Inc.

SITE LOCATION MAP
BUILDING 538 - NEX SERVICE STATION PARCEL
AND BUILDING 605 - ENVIRONMENTAL SHED
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	AS NOTED
FILE	I:\..\NASB_BLDG_538_LOCUS.MXD
REV	0
DATE	02/18/11
FIGURE NUMBER	1

I:\02258\CP.DR\NASB_BLDG_538_SITE_MAP.MXD DWM 02/18/11



Building Corner	Northing	Easting
Northeast	387224.250	3015536.810
Southeast	387142.000	3015530.810
Southwest	387155.620	3015393.310
Northwest	387186.120	3015396.440

Coordinates are in NAD 1983, Maine West, Feet

Tetra Tech NUS, Inc.

SITE LOCATION MAP
BUILDING 538 - NEX SERVICE STATION PARCEL
AND BUILDING 605 - ENVIRONMENTAL SHED
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE: AS NOTED
FILE: \..\NASB_BLDG_538_SITE_MAP.MXD
REV: 0
DATE: 02/18/11
FIGURE NUMBER: 2

ACAD: \02258\CP.DR\NASB_BLDG_538_PRE.DWG 02/18/11 DWM

LEGEND

- SB01 ● SHALLOW SOIL SAMPLE LOCATION
- WP01 ▲ FLOOR WIPE SAMPLE LOCATION
- WP03 ■ WALL WIPE SAMPLE LOCATION
- ⊕ OIL/WATER SEPARATOR
- FENCING

GRAPHIC SCALE

0′ 25′

TETRA TECH NUS, INC.

PRE-CLEANING SAMPLE LOCATIONS
BUILDING 538 - NEX SERVICE STATION PARCEL
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	AS NOTED
FILE	\..\NASB_BLDG_538_PRE.DWG
REV	0
DATE	02/18/11
FIGURE NUMBER	3

ACAD: \02258\CP.DR\NASB_BLDG_538_POST.DWG 02/18/11 DWM

TETRA TECH NUS, INC.

POST-CLEANING SAMPLE LOCATIONS
BUILDING 538 - NEX SERVICE STATION PARCEL
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	AS NOTED
FILE	\..\NASB_BLDG_538_POST.DWG
REV	0
DATE	02/18/11
FIGURE NUMBER	4

BUILDING 538

BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22

Inspection Date: 2/2/2010
Personnel: Brandon Smith, P.E. / James Forrelli, P.E.
Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name:	NEX Service Station
Function:	Service and gasoline station and bottle/can recycling
Size:	5,292 SF
Year of Construction:	1957

Building 538 is located northeast of the intersection of Burbank Avenue and Pelican Street at NAS Brunswick. It was constructed in 1957 and served as a service and gasoline station for it's entire history. Four of the service bays on the eastern portion of the building were converted to a bottle and can recyling space and storage at an unknown date. Building 538 consists of a 5,292 square-foot, one story building on a slab foundation.

Building 538 was used as service and gasoline station including retail vending space and a bottle and can recyling space. Building 538 contains a two bay service area, four storage rooms, office, retail space, and a recycling space in a converted service bay on the eastern portion of the building. The service island and pumps were removed in 2009. Building 538 is part of the NEX Service Station POL site in which petroleum contaminated soil and groundwater is being remediated under the POL Site program.

Building 538 was heated via a fuel oil fired furnace.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 538. Universal waste including car batteries was generated and disposed of offsite properly.
The building was unoccupied at the time of the site visit and appeared in fair condition. The gasoline pumps and island, hydraulic lifts and automotive and retail supplies were not present.
No potential evidence of current or past hazardous waste generation activities was observed.
No evidence of hazardous waste residues was observed.
Typical petroleum staining was observed in the service bay and a recent leak of fuel oil from the day tank was observed with a strong petroleum odor and staining . No modifications to the structure, which may conceal signs of a past release, were observed.
No hazardous waste storage areas or hazardous waste accumulation areas were observed. It is unknown where universal waste was stored prior to collection by NASB Environmental or the location of the former waste oil ASTs.

HAZARDOUS WASTE STORED / GENERATED

No record of hazardous waste stored or generated at Building 538 with the exception of universal waste, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

The NASB transformer database lists the following transformer associated with Building 538:
75 KVA Pad-Mounted - RTE Serial No. 876000111 - Non-PCB containing (Mineral Oil)

Due to the age of the building, soil sampling around the pad is recommended in order to confirm that the soil is free of PCBs from potential former transformers.

BUILDING 538

APPLICABLE REPORTS / DOCUMENTS

Available historical plans and aerial photos were reviewed for past property uses:

1943 plan - No buildings present. Building 17 (Barracks) present to the north and Building 19 (Barracks) to the west.
1946 plan - Same as 1943.
1952 plan - Same as 1946.
1956 plan - T-220 (Navy Exchange Filling Station) is present at current location of Building 538.
1958 aerial - Building 538 (NEX gas station) present with Building 295 to the north, Building 17 to the north and Building 19 to the west.
1978 aerial - Same as 1958 aerial; Building 19 to the west has been demolished.
1981 aerial - Same as 1978 aerial; Building 17 demolished and Building 11 (NEX) constructed to the east.
1983 plan - Building 538 not shown. Buildings 225/252 present to the west and Building 11 (NEX) to east.
1984 aerial - Same as 1981 aerial.
1989 plan - same as 1983 plan
1989 aerial - same as 1984 aerial.
1993 aerial - same as 1989 aerial.
2006 plan - Building 538 shown in current location with Building 295 to the north.

According to NASB records, the following USTs were present at Building 538:
10045-059, a 275 gallon steel UST containing lube oil (installed 1974, removed Nov 1989
14682-001, a 10,000 gallon steel UST containing unleaded gasoline (installed 1974, removed 10/22/92)
14682-002, a 10,000 gallon steel UST containing premium unleaded gasoline (installed 1974, removed 10/26/92)
14682-003, a 10,000 gallon steel UST containing premium gasoline (installed 1974, removed 10/27/92)
14682-004, a 10,000 gallon steel UST containing premium unleaded gasoline (installed Jul 1993, removed Sep 2009)
10045-063, a 1,000 gallon steel UST containing #2 fuel oil (installed 1975, removed 1991)
14682-005, a 10,000 gallon steel UST containing premium unleaded gasoline (installed Jul 1992, removed Sep 2009)

According to NASB records, the following ASTs are present at Building 538:
A538.0, a 550 gallon DWS tank containing #1 fuel oil for heating (installed 1991, active)
A538.1, a 275 gallon SWS tank for waste oil accumulation (installed 1993, removed 1996)
A538.2, a 250 gallon DSWV tank for waste oil accumulation (installed 1996, removed 2001)

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 538 except temporary of universal waste, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith, NAS Brunswick Hazardous Waste Manager.

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE: _____

Brandon Smith, P.E.

BUILDING 605

HWSA INSPECTION REPORT
HAZARDOUS WASTE STORAGE AREAS CLOSURE
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22

Inspection Date: 7/23/10
Personnel: Brian Geringer
Weather: Sunny 80s

GENERAL BUILDING INFORMATION / USES

Building Name: Building 605, Environmental Shed
Function: Building 538 NEX Service Station Soil/Groundwater Remedial Equipment Shed
Size: 120 SF
Year of Construction: 1993
Building 605 is located at NASB Brunswick immediately north of Building 538, at the northeast corner of Building 538 on the Building 538 Parcel. The Building 538 Parcel is located northeast of the intersection of Burbank Avenue and Pelican Street, south of Building 295 (Water Reservoir Pump House), and west of Building 11 (NEX Retail Store). It was constructed in 1993 and served as Environmental Shed for its entire history; although the shed was previously referred to as the "Treatment Building" in several consultant reports. Building 605 consists of a wood frame with clapboard exterior, single-room single level building on a concrete slab foundation. Building 605 was used only as soil/groundwater remedial equipment operations and storage space. Building 605 is not heated or air conditioned.

No hazardous materials were used in its operation and no hazardous waste was generated, since remedial operations were conducted for a "virgin" petroleum release only, according to NAS Brunswick personnel.

Building 605 is located on the Building 538 parcel; refer to the Building 538 HWSA Inspection Report for information relating to the inspection of Building 538.

HWSA INSPECTION / CONDITION

No record of hazardous waste stored at Building 605 was discovered to date. Universal waste was generated at Building 538 and reportedly disposed of per regulatory requirements. Additionally, waste oil was generated at Building 538 during the servicing of vehicles and temporarily stored on site in a successive series of underground and above ground storage tanks for the period of 1957 to 2001, located on the western side of Building 538.

At the time of inspection, Building 605 was unoccupied and in good condition.
No other evidence of current or past hazardous waste generation was observed.

No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed. No modifications to the structure, which may conceal signs of a past release, were observed.

No hazardous waste storage areas or hazardous waste accumulation areas were observed in Building 605.

POTENTIAL PCB-CONTAINING TRANSFORMERS

Two transformers were observed on the Building 538 parcel; refer to the Building 538 HWSA Inspection Report.

No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed.

APPLICABLE REPORTS / DOCUMENTS

Available historical aerial photos were reviewed for past uses:
1943 plan – No buildings present. Building 17 (Barracks) present to the north and Building 19 (Barracks)

to the east.
1946 plan – Same as 1943 plan.
1952 plan – Same as 1943 plan.
1953 aerial – Buildings 17 & 19, north and east, respectively, of the Building 538 parcel are visible.
1956 plan – Buildings T-220 (Navy Exchange Filling Station) is visible on the Building 538 parcel. Buildings 17 & 19 are present.
1957 plan – Building 295 (not labeled) is located above an underground storage tank for water, abutting the northern side of the Building 538 parcel, south of Building 17.
1958 aerial – Building 538 is visible on the subject parcel, located immediately north of Burbank Ave.
1961 aerial – Photograph lacks clarity and sufficient detail to make a determination of Building 538 parcel structures.
1965 building list – Building 538 listed as NX Service Station. Buildings 17, 19 and 295 are also listed.
1975 plan – Building 538 is visible on the subject parcel. Buildings 17 and 295 are visible on adjacent sites.
1976 building list – Building 538 listed as NX Service Station. Buildings 17and 295 are also listed.
1978 aerial – Building 538 is visible, appears to have doubled in area, now forming an "L" shape, with expansion on the east side.
1981 aerial – Same as 1978 aerial, with further expansion on the eastern end of the north side, of the structure.
1984 aerial – Same as 1981 aerial.
1989 plan – Subject area of the plan was in to poor a condition to make a definitive observation.
1989 aerial – Same as 1981 aerial.
1993 aerial – Same as 1981 aerial.
1997 aerial – Same as 1981 aerial.
2003 building list – Buildings 538 (NEX Service Station) and 605 (Environmental Shed) are located on the parcel.
2006 plan –Buildings 538 and 605 (unlabelled) present in current positions.

No above ground storage tanks (ASTs) service Building 605; although one AST is located on the Building 538 parcel and formerly serviced the furnace in Building 538. Refer to the Building 538 HWSA Inspection Report for additional information on this AST. No underground storage tanks (USTs), or oil-water separators (OWS) were registered to Building 605.

Two transformers are located on the Building 538 parcel, north of Building 538; refer to the Building 538 HWSA Inspection Report for additional information on this transformer.

HAZARDOUS WASTE STORAGE RECORDS

No record of hazardous material use or hazardous waste in Building 605 was discovered to date.
No hazardous waste was historically stored at Buildings 605 according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

The Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith Hazardous Waste Manager.

(SEE ATTACHED SITE SKETCH AND HWSA SKETCH)

(SEE ATTACHED PHOTOGRAPHS)

INSPECTOR SIGNATURE: _____

PHOTOGRAPHS

No. 1 Building 538 – NEX Service Station Parcel, NAS Brunswick February 2, 2010
NEX Service Station southeast elevation

No. 2 Building 538 – NEX Service Station Parcel, NAS Brunswick February 2, 2010
NEX Service Station southwest elevation with service bay and retail store

No. 3 Building 538 – NEX Service Station Parcel, NAS Brunswick February 1, 2011
NEX Service Station interior; west garage west bay floor drain and O/W separator

No. 4 Building 538 – NEX Service Station Parcel, NAS Brunswick February 2, 2010
NEX Service Station interior; east garage former bottle and can recycling area

No. 5 Building 538 – NEX Service Station Parcel, NAS Brunswick February 2, 2010
Building 538 – pad-mounted transformers for Building 295 (left) and for Building 538 (right)

No. 6 Building 538 – NEX Service Station Parcel, NAS Brunswick July 22, 2010
Environmental Shed (Building 605) east elevation, Building 538 (NEX Service Station) at left of frame

No. 7 Building 538 – NEX Service Station Parcel, NAS Brunswick July 22, 2010
Environmental Shed (Building 605) west elevation, Building 11 (Navy Exchange Retail Complex) in background

No. 8 Building 538 – NEX Service Station Parcel, NAS Brunswick July 22, 2010
Environmental Shed (Building 605) interior of the shed with remedial equipment for air sparging and soil vapor extraction